

CLAIMS

1. Cardiac pacemaker electrode arrangement (1) comprising a cardiac pacemaker electrode (5), which, in an operational position, acts on an outside of a heart (2) or on the heart (2) from an outside thereof and/or which is arranged or which can be fixed with a pole (3) in heart tissue and which extends to an implantable cardiac pacemaker (4) and which has an electrode feed line (6), and with an anchor that can be fixed from the outside of the heart (2) in the operational position, and at least one tool and/or aid used for positioning and/or fixing the anchor, comprising at least one hollow puncture needle (7) and one insertion tube (8) for the hollow puncture needle (7), an inner cross section of the insertion tube (8) is dimensioned large enough that the cardiac pacemaker electrode (5) fits into the tube and can move in the tube with the anchor provided on a distal end of the cardiac pacemaker electrode (5).
2. Electrode arrangement according to Claim 1, wherein after withdrawal of the hollow puncture needle (7), the cardiac pacemaker electrode (5) can be inserted into the heart tissue and into a channel formed by the hollow puncture needle (7) through the insertion tube (8) leading from the outside into the heart tissue.
3. Electrode arrangement according Claim 1, wherein on the distal end of the cardiac pacemaker electrode (5) there is a screw thread (9) as the anchor, having a center axis that forms a continuation of a longitudinal center axis of the cardiac pacemaker electrode (5), the cardiac pacemaker electrode (5) is flexible, such that it can twist, and a channel is arranged therein for a piercing instrument (10) used as the tool or as an additional tool, and in a region of the screw thread (9) there is a profiled section, especially a flattened shape or recess, which fits with a working end of the piercing instrument (10) or tool with a positive fit in the direction of rotation.

4. Electrode arrangement according to Claim 1, wherein at least one ring-like projection (11), umbrella-like projection, and/or barb-like projection (12) is arranged at the distal end of the cardiac pacemaker electrode (5) as the anchor or an additional anchor.
5. Electrode arrangement according Claim 1, wherein several anchors (9, 11, 12) are provided one behind the other in the axial direction.
6. Electrode arrangement according to Claim 1, wherein the electrode arrangement has a biventricular design and the electrode feed line (6) has two branching electrodes (5), which then run separately to the heart (2) and each of which has at least one of the anchors for attachment to the heart (2).
7. Electrode arrangement according to Claim 1, wherein an anode (14) of the electrode or electrodes (5) is arranged outside of the heart (2) at a distance to a cathode or to the pole (3) located on the heart (2) and for a biventricular, branched electrode arrangement, in a region of the common feed line (6) before a branching (13) into the two electrodes.